



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,006	12/10/2003	Mark G. Reichmann	17142	9434
23556	7590	07/27/2007	EXAMINER	
KIMBERLY-CLARK WORLDWIDE, INC.			MATZEK, MATTHEW D	
Catherine E. Wolf			ART UNIT	PAPER NUMBER
401 NORTH LAKE STREET			1771	
NEENAH, WI 54956			MAIL DATE	DELIVERY MODE
			07/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/734,006	REICHMANN ET AL.
Examiner	Art Unit	
Matthew D. Matzek	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 06 September 2006.

2a)  This action is FINAL.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-28 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All   b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. \_\_\_\_\_.  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_. 5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_\_

***Response to Appeal Brief***

1. In view of the Appeal Brief filed on 9/6/2006, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:



TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

2. The previous prior art rejections are hereby withdrawn as they failed to teach the claimed blend of a biodegradable aliphatic polyester polymer and a second polymer, which is amorphous.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 6, 8-12, 15 and 23-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsui et al. (US 6,174,602 B1).

Matsui et al. disclose a biodegradable fiber excellent in bulkiness, softness, stretchability and feeling, which comprises **A** a low heat-shrinkable fiber component, and **B** a high-heat shrinkable fiber component comprising an aliphatic polyester, which is a mixture of aliphatic polyesters with differing melting points (abstract). The **B** component comprises at least two aliphatic polyesters **H** and **S**; the difference in melting point between them is at least 20°C (col. 19, lines 16-19). The soft aliphatic polyester **S** is amorphous (col. 31, lines 12-14). The hard aliphatic polyester **H** may comprise 90-10 weight percent of the **B** polymeric composition and the soft aliphatic polyester **S** may comprise 10-90 weight percent of **B** (col. 17, lines 1-13). The applied invention may be used to produce a nonwoven fabric (col. 4, lines 1-10). L-lactide is used as the aliphatic polyester (col. 8, lines 5-15). The nonwoven web of the applied invention may be a spunbond nonwoven web (col. 9, lines 35-40). Figures 1C and 1G illustrate multi-component embodiments wherein at least a portion of an outer surface of the multi-component fibers comprises the polymer blend. The applied invention may be used in a number of different articles such as undergarments, clothing, etc. and may be used in all of the claimed structures because the applied invention possesses the claimed structure (col. 11, lines 40-45). The applied invention may be in either staple fiber or continuous filament form (col. 9, lines 36-50).

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsui et al. (US 6,174,602 B1).

Matsui et al. do not specifically disclose the claimed structures of instant claims 16-22, but the applied invention may be used in a number of different articles such as undergarments, clothing, etc. and may be used in all of the claimed structures because the applied invention possesses the claimed structure (col. 11, lines 40-45).

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsui et al. (US 6,174,602 B1) as applied to claim 1 above, and further in view of Ryan et al. (US 6,506,873 B1). Matsui et al. teach the use of lactides, which comprise isomers, but fails to teach what type of lactide and the quantity of the lactide (col. 8, lines 5-20).

a. Ryan et al. relates to nonwoven fibrous material, which includes a plurality of polylactide containing fibers (Abstract and col. 1, lines 16-17). The nonwoven can have utility in medical, hygiene, disposable and durable nonwoven applications where biodegradability can advantageously be combined with a fabric or laminate function. Some applications are diapers, training pants, and feminine absorbent articles, among others (col. 3, lines 28-38). The preferred fibers include at least one component, polylactide or polylactic acid (PLA). The reference teaches multi-component fibers that include at least one component based upon polylactide and at least one additional component, which may be based upon polylactide or upon a material other than

polylactide (col. 3, lines 56-67 through col. 4, lines 1-3). The reference teaches that preferred meltstable polylactide compositions preferably include a D-lactide concentration of less than about 5% by weight (col. 16, lines 36-54). Among the polymers that can be used as other components in a multi-component fiber include polyolefins, polyamides, aromatic/aliphatic polyesters, biodegradable aliphatic polyesters and biodegradable aliphatic-aromatic polyesters (col. 10, lines 53-67). The reference also teaches the use of polycaprolactone (PCL), polyhydroxy propionate (or butylate, capreolate or valerate), among others (col. 11, lines 47-57). Fiber formation processes include melt spinning, melt blowing and spunbonding (col. 12, line 2 & col. 27, lines 1-2). The reference also teaches carding (col. 26, lines 50-52).

b. Since Matsui et al. and Ryan et al. are from the same field of endeavor (i.e. degradable aliphatic polyester fibers), the purpose disclosed by Ryan et al. would have been recognized in the pertinent art of Matsui et al.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Matsui et al. with the motivation of minimizing the D-lactide level to improve the polymer's ability to crystallize as disclosed by Ryan et al. (col. 16, lines 36-54).

6. Claims 7, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsui et al. and Ryan et al. as applied above to claims 4 and 5, and further in view of Fletcher et al. (US 2002/0111596 A1).

Matsui et al. and Ryan et al. are silent to the use of a polyalphaolefin, but both references teach the use of poly-caprolactone. Fletcher et al. teaches material suitable for a

flushable absorbent assembly and teaches the use of amorphous polyalphaolefin or a poly-caprolactone [0078]. Therefore, because these two polymers were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the poly-caprolactone taught by Matsui et al. for polyalphaolefin.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is 571.272.2423. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571.272.1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mdm

MDM

  
TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700